

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-35, and add new claims as set forth below.

Claims 1-35. (Canceled)

36. (New) A web-guiding device comprising:
at least one guide element for non-contact web guidance;
wherein the guide element has a guide surface, the guide surface comprising an air-permeable porous material to which compressed air is applied;
whereby air flowing through the porous material forms an air cushion between the guide surface and a material web; and
wherein the guide surface is divided along the direction of movement (L) of the material web into at least one web transition zone and a web-guiding zone.
37. (New) The web-guiding device of claim 36, wherein the at least one web transition zone has a higher air throughput than the web-guiding zone.
38. (New) The web-guiding device of claim 36, wherein the web transition zone is one of a web run-on zone and a web run-off zone.
39. (New) The web-guiding device of claim 36, wherein the guide surface has two web transition zones between which, with respect to the direction of movement (L) of the material web, the web-guiding zone is arranged.
40. (New) The web-guiding device of claim 39, wherein the two web transition zones are a web run-on zone and a web run-off zone, and wherein the web run-on zone and the web run-off zone have a different air throughput.

41. (New) The web-guiding device of claim 36, wherein porosity of the at least one web transition zone and porosity of the web-guiding zone are different.

42. (New) The web-guiding device of claim 41, wherein the porosity of the at least one web transition zone is higher than the porosity of the web-guiding zone.

43. (New) The web-guiding device of claim 42, wherein the porosity of the at least one web transition zone is higher than the porosity of the web-guiding zone by a factor of at least one of at least 1.5 and at least 2.

44. (New) The web-guiding device of claim 36, wherein the at least one web transition zone and the web-guiding zone have compressed air applied to them at one of the same pressure and a different pressure.

45. (New) The web-guiding device of claim 44, wherein when different pressure is applied, the pressure difference is one of at least 2 bar and at least 4 bar.

46. (New) The web-guiding device of claim 44, wherein the at least one web transition zone has compressed air applied to it at a higher pressure than the web-guiding zone.

47. (New) The web-guiding device of claim 36, wherein the guide surface is curved and wherein the at least one web transition zone extends along the direction of movement (L) of the material web, with respect to the radius of curvature of the guide surface, by a segment angle of at least one of at least $\pm 5^\circ$, and between $\pm 10^\circ$ and $\pm 20^\circ$, about the geometric point at which the material web runs one of on and off the guide surface.

48. (New) The web-guiding device of claim 47, wherein the at least one web transition zone extends by an asymmetric segment angle about the geometric point at which the material web runs one of on and off the guide surface.

49. (New) The web-guiding device of claim 36, the guide element further comprising at least one pressure chamber via which compressed air can be applied to the porous material.

50. (New) The web-guiding device of claim 49, wherein the porous material is applied at least partly to a carrier containing the pressure chamber and provided with air passage openings.

51. (New) The web-guiding device of claim 49, wherein the porous material forms at least part of a pressure chamber wall.

52. (New) The web-guiding device of claim 36, wherein pressure in an interior of the guide element is at least one of higher than 0.5 bar and higher than 1 bar.

53. (New) The web-guiding device of claim 36, wherein specific volume flow in the porous material is between 10 and 5000 Nm³/h·m².

54. (New) The web-guiding device of claim 36, wherein pore spacing of the air-permeable porous material is less than 1 mm.

55. (New) The web-guiding device of claim 36, wherein average size of pores of the porous material is one of less than 0.2 mm and less than 0.1 mm.

56. (New) The web-guiding device of claim 36, wherein pressure loss from a side facing away from the moving material web toward a side of the porous material facing the material web is one of greater than 0.2 bar and greater than 0.8 bar.

57. (New) The web-guiding device of claim 36, wherein the guide element is a roll.

58. (New) The web-guiding device of claim 57, wherein the guide element is one of a stationary roll and a nonrotating roll.

59. (New) The web-guiding device of claim 57, wherein the air cushion is produced only on part of a circumference of the roll.

60. (New) The web-guiding device of claim 57, wherein the guide element is one of a rotating roll and a driven roll.

61. (New) The web-guiding device of claim 36, wherein the guide element is a segment of a curve.

62. (New) The web-guiding device of claim 36, wherein one of the guide element and the guide surface has a course curved in a transverse direction.

63. (New) The web-guiding device of claim 36, wherein the guide surface is subdivided transversely with respect to the direction of movement (L) of the material web into a plurality of zones, the zones designed for a different air throughput.

64. (New) The web-guiding device of claim 36, the guide element further comprising at least two segments, the segments at least one of along and transversely with respect to the direction of movement (L) of the material web.

65. (New) The web-guiding device of claim 36, wherein the guide surface of the guide element comprises at least two layers, each layer consisting at least partly of air-permeable porous material.

66. (New) The web-guiding device of claim 36, wherein the surface of the guide element facing the material web is sintered.

67. (New) The web-guiding device of claim 36, wherein the surface of the guide element facing the material web comprises ceramic material.

68. (New) A machine for at least one of production of a material web and treatment of a material web, comprising at least one web-guiding device, the web-guiding device comprising:

at least one guide element for non-contact web guidance;

wherein the guide element has a guide surface, the guide surface comprising an air-permeable porous material to which compressed air is applied;

whereby air flowing through the porous material forms an air cushion between the guide surface and a material web; and

wherein the guide surface is divided along the direction of movement (L) of the material web into at least one web transition zone and a web-guiding zone.

69. (New) The machine of claim 68, wherein the guide element is wrapped around by the material web.

70. (New) The machine of claim 68, wherein the guide element is wrapped around by the material web and by at least one of a moving belt and a fabric belt.